# Yifeng Ding



## Research Interests

My research interest lies in Large Language Models (LLMs) for Software Engineering. Currently, I focus on using LLMs to improve automated debugging techniques, including Automated Program Repair (APR) and Fault Localization (FL). One of my recent LLM4APR works, FitRepair [2], has been published in ASE'23.

My ongoing works include improving LLM's instruction-following ability for automated debugging, and augmenting LLMs with retrieval for project-level debugging tasks.

## Education

Since 2022 University of Illinois at Urbana-Champaign (UIUC),

Ph.D. student in Computer Science,

Advisor: Prof. Lingming Zhang

Tsinghua University, 2018-2022

B.S. in Software Engineering,

Double Major: B.S. in Business Administration

#### **Publications**

- Yuxiang Wei, Zhe Wang, Jiawei Liu, Yifeng Ding, and Lingming Zhang. "Magicoder: Source Code Is All You Need". In: *arXiv*. [preprint].
- Chunqiu Steven Xia, Yifeng Ding, and Lingming Zhang. "The Plastic Surgery Hypothesis in the Era of Large Language Models". In: 38th IEEE/ACM International Conference on Automated Software Engineering (ASE 2023). [paper].
- Quan Zhang, Yongqiang Tian, Yifeng Ding, Shanshan Li, Chengnian Sun, Yu Jiang, and Jiaguang Sun. "CoopHance: Cooperative Enhancement for Robustness of Deep Learning Systems". In: 32nd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2023). [paper].
- Quan Zhang, Yifeng Ding, Yongqiang Tian, Jianmin Guo, Min Yuan, and Yu Jiang. "AdvDoor: Adversarial Backdoor Attack of Deep Learning System". In: 30th ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2021). [paper].

# Academic Service

Organizing The First International Workshop on Large Language Models for Code (LLM4Code 2024), Committee co-located with ICSE 2024

## Talk

[1] Uber Programming Systems Team: Equipping Large Language Models with Domain-Specific Knowledge for Automated Program Repair

# Honors & Awards

- 2021 Research Excellence Scholarship, Tsinghua University
- 2019 Academic Excellence Scholarship, Tsinghua University